

Benchmarking and disclosure for Toronto BEPS

Memo 3 of 3

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BDA



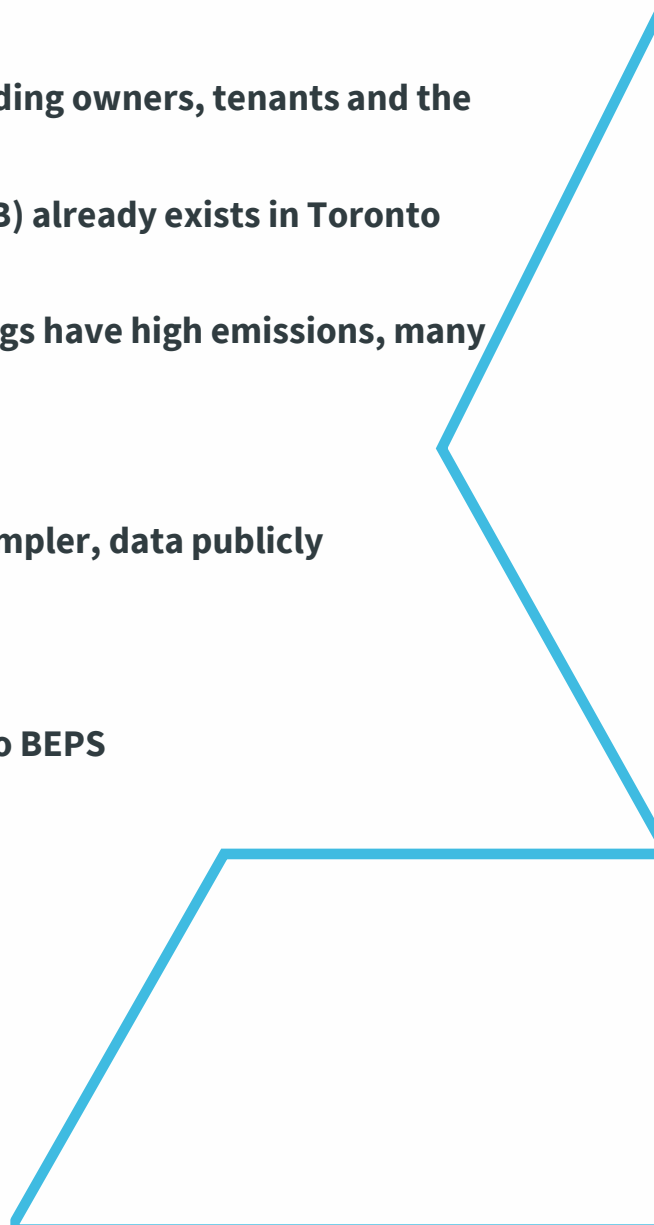
Toronto's BEPS motion to report back to Council in Q1 2027

- City of Toronto is developing **Building Emissions Performance Standards (BEPS)** bylaws that would phase in greenhouse gas (GHG) limits on larger Commercial (offices and retail) and multi-unit residential buildings (MURBs) by archetype and size.
- Programs and resources will be available to **support compliance**.
- **BEPS are a substantial action** under the TransformTO Net Zero Strategy **to reduce emissions from buildings**.
- BEPS have the potential to **unlock significant economic value in Toronto**.
- Motion from the City's Infrastructure and Environment Committee (IEC) to **report back in Q1 of 2027** with updated policy recommendations.





BEPS in Toronto

1. **Data benchmarking and disclosure benefit building owners, tenants and the City of Toronto**
 2. **Energy and water reporting for buildings (EWRB) already exists in Toronto and is a steppingstone to BEPS**
 3. **EWRB highlights how a small number of buildings have high emissions, many are MURBs**
 4. **Toronto is refining EWRB's existing framework**
 5. **EWRB can be reinforced by making reporting simpler, data publicly accessible, and expanding coverage**
 6. **EWRB was the first step, BEPs is the next one**
 7. **There is strong support to step up from EWRB to BEPS**
 8. **BEPS-type programs are being used elsewhere**
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1. Data benchmarking and disclosure benefit building owners, tenants and the City of Toronto

Building owners

- Understand their building's energy and emissions profile
- Identify energy-saving opportunities
- Compare performance to other buildings and over time
- Prioritize long term capital investments

Tenants

- Compare the true rental or leasing cost of buildings
- Identify energy-saving opportunities

City of Toronto

- Understand the portfolio of buildings in the city
- Identify under-performing buildings
- Help set BEPS emissions limits and verify compliance
- Data benchmarking is needed for BEPS to succeed



2. Energy and water reporting for buildings (EWRB) already exists in Toronto and is a steppingstone to BEPS

City of Toronto mandatory **energy and water reporting (EWRB)**

- Since 2024 for buildings $\geq 50,000$ sq ft (Ontario also requires EWRB for these buildings)
- Expanded to buildings $\geq 10,000$ sq ft in 2027
- >64% compliance in 2024 after deadline extended

For Toronto buildings >100,000 sq ft

- 2466 buildings in 2024
- 50% underwent a Portfolio Manager Data Quality Check
- 76% have an Energy Star score
 - Of those with a score, 59% perform below than the national median (ENERGY STAR Score > 50)

Emissions are directly related to **energy** use

Energy reporting is a pre-requisite to BEPS



3. EWRB highlights how a small number of buildings have high emissions, many are MURBs

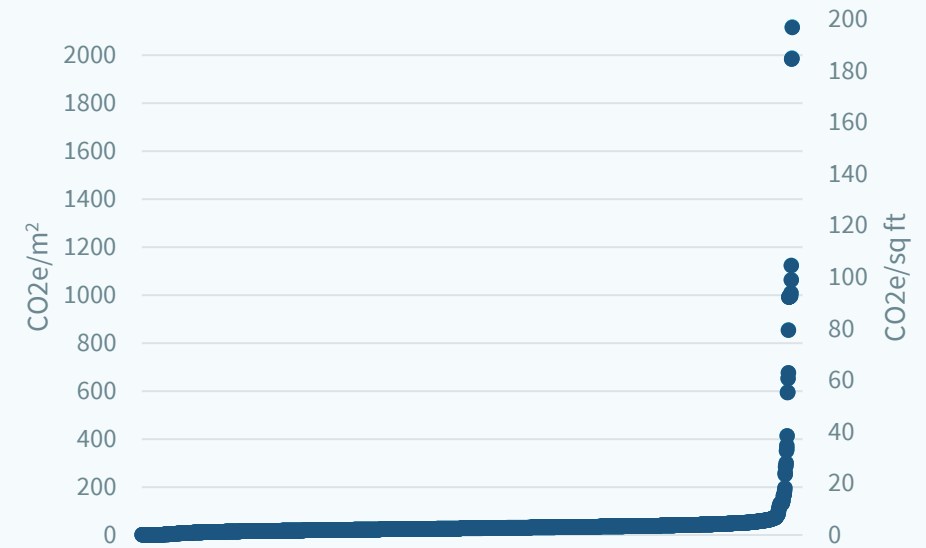
Most City of Toronto buildings >100,000 sq ft have low emissions intensities

- 92% have emissions <50 kgCO₂e/m²
- Median is 27 kgCO₂e/m²

A small number of buildings have very high emissions intensities

- 2% > 100 kg CO₂e/m²
 - 60% of these are MURBs
 - Note: Some may be high due to data errors
- **16 of the 20 worst performing are MURBs**

Toronto EWRB applies to buildings >50,000 sq ft but data is not yet publicly available



4. Toronto is refining EWRB's existing framework

Data collection - ENERGY STAR Portfolio Manager

- Uncertain future due to US EPA funding cuts

Reporting

- Administration to complete process
- Challenges obtaining whole-building utility data when multiple meters are in use
- Costs for 3rd party data verification
- **City is developing resources to assist building owners**

Data quality

- Outliers in current data set suggest data errors
- **Qualified 3rd party data verification required every 5 years for large buildings**

Building coverage

- EWRB does not yet cover buildings <50,000 sq ft, making it difficult for CoT to establish BEPS limits for these buildings
- Condominiums largely exempt because EWRB applies to units, not the building
- **City plans to submit recommendations to require whole-building condo reporting**



5. EWRB can be reinforced by making reporting simpler, data publicly accessible, and expanding coverage

Streamline data collections

- Require utilities to deliver aggregated data to buildings with multiple tenants or multiple meters
- Standardize data delivery e.g. in Portfolio Manager
- Harmonize Toronto and Ontario EWRB filings

Improve public disclosure of reported data

- Ensure data is publicly accessible and easy to understand e.g. scorecard format
- Publish a list of buildings that need to comply

Expand EWRB reporting to buildings >10,000 sq ft



6. EWRB was the first step, BEPS the next one

Many building owners are **failing** to perform even **routine maintenance** without **enforcement**

- RentSafeTO issued 1,788 Orders to Comply to rental owners in 2023

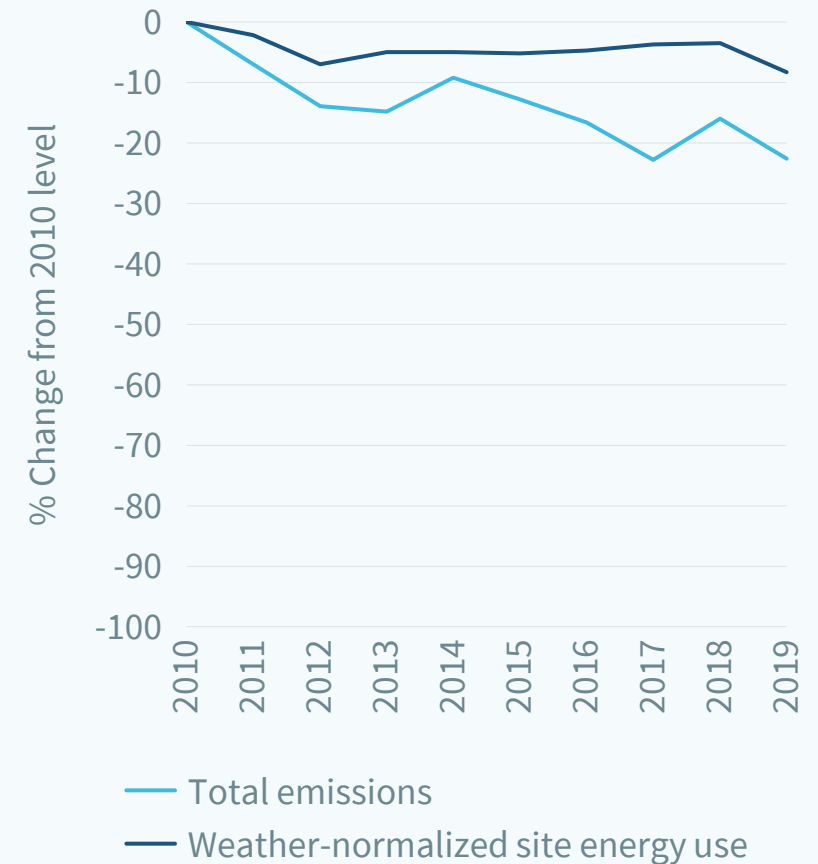
When **tenants pay utilities**, building owners have **no incentive** to improve **energy efficiency**

NYC shows reporting is not enough

- Energy benchmarking since 2017
- 8% reduction in EUI for 2010-2019
- 23% reduction in GHG for 2010-2019
 - driven by regulations, cleaner electricity and benchmarking
 - **benchmarking on its own wasn't enough**
- BEPS introduced in 2019

EWRB is not enough, we need BEPS too

NYC building energy use intensity and emissions trend

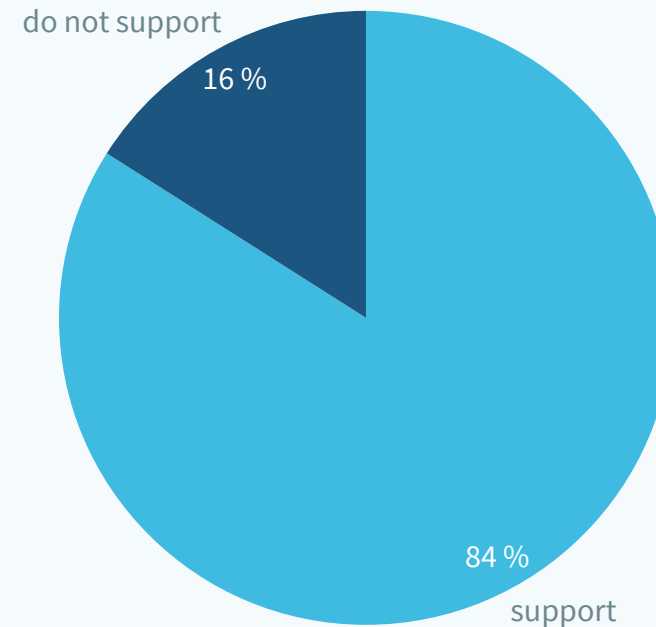


7. There is strong support to step up from EWRB to BEPS

Strong support for BEPS from

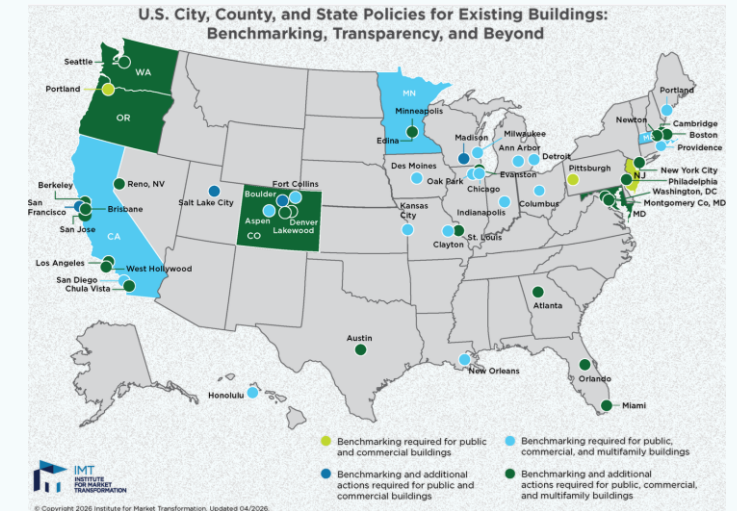
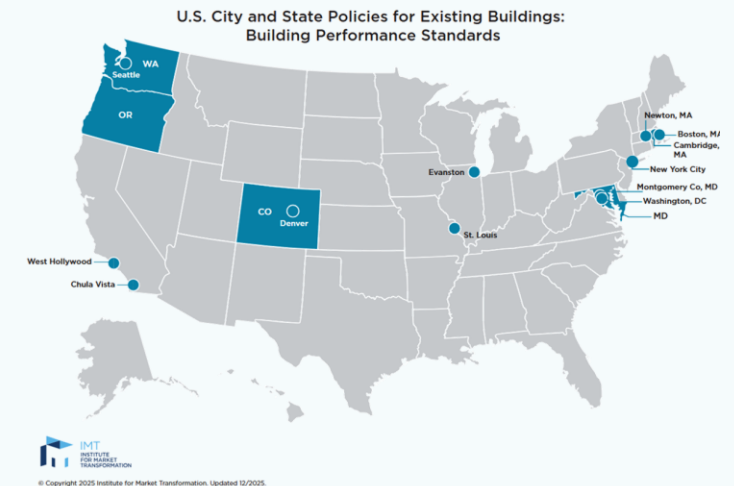
- Industry and community stakeholders
- Building owners and tenant orgs
- Engineers, architects
- Construction firms
- Financial experts
- Citizens

84% of Torontonians support implementing municipal requirements to reduce GHGe from buildings



8. BEPS-type programs are being used elsewhere

- **Benchmarking** has been used as a **first step** toward **building performance standards**
 - Benchmarking
 - 47 US cities, 1 county and 8 states
 - Building Performance Standards (BPS)
 - 11 US cities, 1 county and 4 states + EU
- Existing BEPS-type programs often **start with large buildings** and progressively add smaller ones over time
 - E.g. Seattle BEPS target compliance year
 - 2031 for >220,000 sq ft
 - 2032 for 90,001-220,000 sq ft
 - 2033 for 50,001-90,000 sq ft
 - 2034 for 30,001-50,000 sq ft
 - 2035 for 20,001-30,000 sq ft
- **Toronto BEPS will be the first mandatory program in Canada**
 - building off its EWRB currently for buildings >50,000 sq ft



BEPS in Toronto

"You can't manage what you don't measure. Getting a handle on current and past energy use is a critical first step." U.S. EPA Energy Star

Memo 1: Toronto BEPS for macroeconomic value creation

Memo 2: Toronto BEPS: Risks and opportunities for housing affordability



Thank You

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